

Active Recombinant Human CYP3A7 Protein

Cat. No. CYP3A7-05H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP3A7 and human CYP-reductase without tag was coexpressed in Escherichia coli. Amount: 0.5 nmol cytochrome P450
Species	Human
Source	E.coli
Description	This gene encodes a member of the cytochrome P450 superfamily of enzymes, which participate in drug metabolism and the synthesis of cholesterol, steroids and other lipids. This enzyme hydroxylates testosterone and dehydroepiandrosterone 3-sulphate, which is involved in the formation of estriol during pregnancy. This gene is part of a cluster of related genes on chromosome 7q21.1. Naturally-occurring readthrough transcription occurs between this gene and the downstream CYP3A51P pseudogene.
Bio-activity	Cytochrome c Reductase Activity: 667 nmol/min/mg protein P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 100 mM potassium phosphate buffer (pH 7.4) containing 5 mM magnesium chloride and an NADPH generating system [5 mM glucose 6-phosphate, 1 mM NADP ⁺ , 1 U/ml glucose 6-phosphate dehydrogenase]) Activity: Testosterone 6 β -hydroxylase Linear with time up to: 8 min(Determined at 32 μ M substrate, using a P450 concentration of 50 pmol/ml)

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	<p>Linear with P450 up to: 60 pmol/ml(Determined at 32 μM substrate, using an incubation time of 10 min)</p> <p>Vmax: 2.2 pmol/min/pmol CYP</p> <p>Km: 13 μM</p>
Usage	For laboratory (research) purposes only.
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	<p>P450 Concentration: 1.0 nmol/ml</p> <p>Protein Concentration: 10.0 mg/ml</p> <p>Specific P450 Content: 100 pmol/mg protein</p>
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA
GENE INFORMATION	
Gene Name	CYP3A7 cytochrome P450 family 3 subfamily A member 7 [Homo sapiens (human)]
Official Symbol	CYP3A7
Synonyms	<p>CYP3A7; cytochrome P450 family 3 subfamily A member 7; CP37; CYP11A7; P450HLP2; P450-HFLA; P-450111A7; P-450(HFL33); cytochrome P450 3A7; aryl hydrocarbon hydroxylase; cytochrome P450, family 3, subfamily A, polypeptide 7; cytochrome P450, subfamily IIIA, polypeptide 7; cytochrome P450-HFLA; flavoprotein-linked monooxygenase; microsomal monooxygenase; xenobiotic monooxygenase; EC 1.14.14.1</p>
Gene ID	1551
mRNA Refseq	NM_000765

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Protein Refseq	NP_000756
MIM	605340
UniProt ID	P24462

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